

# Rhodora

## JOURNAL OF

### THE NEW ENGLAND BOTANICAL CLUB

---

Vol. 10.

October, 1908.

No. 118.

---

#### THE THREE ADVENTIVE HEATHS OF NANTUCKET, MASSACHUSETTS.

MARIA L. OWEN.

ON the island of Nantucket are three small heaths which attract a degree of attention quite disproportionate to their size. Botanists look at one and question "How came you here?" Flower lovers admiring all of them are content to say "The self-same power that brought me here brought you." Then the Athenians of our day who spend their time seeking new things wherever they journey, hearing of our plant that grows nowhere else on this continent from Greenland to Cape Horn, rush out to the commons to see it; they may be disappointed at its modest appearance, still they show that they too, in their way, care for the wonder, and for all these pilgrims the following story is written.

*Erica cinerea*, L., *Erica tetralix*, L. and *Calluna vulgaris*, Salisb. are the three heaths, all common and abundant in Northern Europe; the interest lies in the fact that they appear on the Western Continent. Their family is well represented here, but of the genera to which these few specimens belong, *Erica* is totally lacking, and of *Calluna*, although it appears in a few localities quickly counted, it is not certain that it is indigenous with us.

There are three heaths on the island, but it is *Erica cinerea*, the bell-heather, that is the Jean Paul of the trio,— "The Only-One". In August, 1868, a single plant of this species was detected in Nantucket by Mrs. Elizabeth E. Atwater of Chicago, and a notice of this in Wood's Manual of 1874 met my eye. I could hardly believe what I read, but after satisfying myself that there were in the Gray Herbarium specimens verifying Prof. Wood's statement, I took steps to



find the plant again. The island is my birthplace, and I have known its commons, its swamps and thickets, its sea beaches and its pond shores from childhood, but not living there in 1874 I wrote to Mrs. Matthew Starbuck and asked her to be on the lookout for this heather. She is a lady fond of our wild flowers and with facilities for collecting them, but the island has an area of some fifty square miles, and we had no clew to the locality where Mrs. Atwater made her happy find, so it is not strange that years passed before the plant was seen by Nantucket eyes.

I learned in 1879 that Mrs. T. E. Morris, of Saginaw, Michigan, saw it for the second time in 1871. She was Mr. Atwater's niece and was with her uncle and aunt when the plant was first found. In a letter to Mrs. Atwater she tells of visiting again the spot where they had seen it together, of finding "the same old roots" and of searching the vicinity in vain for more specimens. She says "roots"; that is misleading, for there was only one plant, as I know from seeing it many times, year after year.

In 1878 Mrs. Starbuck's daughter, Mrs. Merriam (afterwards Mrs. Spinney), brought home from a walk and showed her mother "a new flower" which the latter declared at once must be the one I had charged her to seek. She was right; the long-hidden heath was re-discovered.

The next time I went to Nantucket I was taken to see the precious plant. It was seven or eight inches high and a bushy little thing, full of flowers; its habit always was to bloom from early summer till late in the fall, and on that account it was conspicuous, but it was fortunately screened from observation by bushes growing between it and the road, and furthermore the bitter polygala, which matches the bell-heather closely in color, was abundant in the vicinity. This plant lived till about 1903, thirty-five years after Mrs. Atwater first saw it. Mrs. Stokeley Morgan, who had known it for several years before its death, tells me that she found it alive and vigorous in the late fall either of 1902 or 1903 and protected it by blocks and boughs; the next spring it was dead, perhaps killed by some heavy thing (part of the protection) which had fallen upon it, or perhaps it had lived its life. And so our fair flower went in mystery as it came. But some time before this Mrs. Morgan had found a second plant not far from the original, and after that was dead she took Judge Churchill of Dorchester to see the new one. He remarked that if the first



had ever ripened seed the prevailing wind at that place would blow it in amongst the trees; they searched at once and were rewarded by the discovery of another plant of the size and apparent age of Mrs. Morgan's first find. This was in 1903 or 1904, and till this year there was no question but they were the direct offspring of Mrs. Atwater's plant; what new testimony has come out will be told farther on. These new plants are in fine condition: I have seen them this year as well as in the two years preceding.

When we consider the eminent botanists who have gone to Nantucket from the time of Oakes and Hitchcock down to the present day and have made diligent collections without ever discovering an *Erica*, it may be confidently inferred that the first specimen could not have been there many years before 1868, but that more may be found is not impossible, for persistent efforts have been made to raise the plant by scattering seed at random and also sowing it in many places.

Mr. Sidney Starbuck told me that he once brought from Scotland two or three pounds of both purple and white heather seed and gave it to his aunt, the Mrs. Starbuck before mentioned, and that she had it sown on the commons.

Mr. John Appleton tells me that the late Mr. Kimball, a well known seedsman and florist of Rochester, N. Y., who had a summer residence on the island for many years, once carried there a bushel of heather seed, with which he supplied those who wanted it until it was nearly all gone and then gave him the remainder which he sowed. Mrs. Dahlgren who spent many summers with her family at their house on the Cliff was so bent on multiplying these additions to the island flora that she procured from a florist directions for propagating heather, and by following them on her own premises with constant care, she raised all three kinds,—the bell-heather, the cross-leaved and the *Calluna* or ling. I saw them once,—tiny little things in two-inch pots, perhaps thirty or more. She gave the plants away generously; I had two myself, but they soon died, and there may not be one living now. I should add that Mrs. Dahlgren, like others already mentioned, took unwearied pains to propagate this pretty heather out of town, with the ultimate object of naturalizing it on the island. On her drives she carried in her lap an uncovered box of seed which she scattered along the roadside, and also had her driver sow some carefully in favorable spots amongst the pines and on the commons.



Miss Lydia M. Folger tells me this year that she was with Mrs. Dahlgren once when she set out plants in just about the spots where Mrs. Morgan found the two now living. This raises the question whether these are really from wind-blown seed or are those of Mrs. Dahlgren's that have lived and flourished. The only thing apparently certain is that they are not to be classed with Mrs. Atwater's discovery. Mrs. Morris searched the vicinity in 1871, and others have done the same year after year, but all in vain till the two specimens now growing near the plant of 1868 appeared; as to the origin of that all are free to form a conjecture, or to call it a waif and there let it rest.

There is no mystery about *Erica tetralix* and *Calluna vulgaris*, found in Mr. Henry Coffin's nursery. It is only this year that I learned the true history of the trees there. I had been told before this that Mr. Coffin, owning unimproved land, exchanged some of it with Mr. George B. Emerson for an equivalent in trees; this is not quite correct, but we are not concerned now with the way Mr. Emerson acquired property in Nantucket. I have at hand a copy of a letter written in April, 1877, by Mr. Coffin to Mr. J. S. Tewksbury of Winthrop, who was Mr. Emerson's agent in the business. He reports in it the arrival of a box of young trees and says that he had at the time of writing finished planting, with the help of three or four men, the six acres of Mr. Emerson's land, and was now going to plant six acres for himself. He was to have twenty thousand two year old trees consigned to him and ten thousand one year old, but apparently they had not all reached him then. He goes on to speak of "the first three boxes which came from Europe, and they contained only 7253 trees, said to be 10,000. They were the fir trees and so were much larger."

This letter proves what had been guessed for many years,—that some, if not all, of the trees were imported stock; we know now that 7253 crossed the ocean to us, quite enough to account for the heaths that sprang up in the nursery. The *Erica* was found there in 1884 by Miss Susan Coffin and the *Calluna* in 1886 by Mr. Lawrence Coffin, but the size of the Callunas showed that they must have been there in 1884, although not distinguished by Miss Coffin and her father. Mr. Lawrence Coffin recognized this heath from his previous familiarity with its appearance. Six years before, while still a school-boy, he had found a single specimen of *Calluna* on the open com-



mon, a plant that could have had no connection with those of the nursery from which it was miles away. This 1880 plant evidently belongs with those scattered specimens found from time to time in our country from Newfoundland to Massachusetts.

Either in 1886 or soon after, the late Mr. John H. Redfield went to Nantucket expressly to see the three heaths of which he had heard from his friend Dr. Asa Gray. After visiting those to which this paper refers, Mr. Lawrence Coffin took him to see the one which he had found so long before. Mr. Redfield wrote to me that the size of the stock and general appearance of this solitary plant indicated a very considerable age. It disappeared years ago.

As for the future of our immigrants, the two bell-heather plants seem likely to live out their natural lives and the ling (*Calluna*) may become naturalized in a few spots. In 1907 I went to see every individual plant of all three of the heaths of which Mr. John Appleton had any knowledge, and he is well informed about their localities. I found the *Calluna* quite widely spread. There is a fine large plant raised from a cutting, carefully cherished in a yard in the heart of the town, and Mr. Appleton has two equally large on his farm transplanted from land of his own adjoining the Coffin nursery, while in the nursery itself there may be from twelve to twenty,—I could not easily count them. A few neglected straggling specimens are still to be found amongst the grass on the Dahlgren place.

Mr. Abajian has attempted propagation and he showed me a few minute specimens in his window box; this was in 1906, but they were gone in 1907. A “cliff-dweller” took me to two beautiful plants on the face of the Cliff set out there a few years before, now large and healthy bushes;—this because I was trustworthy, so I say no more of that locality.

Next a most interesting patch far along on the Cliff. Within a space measuring twelve feet by six, there are, by actual count, about fifty vigorous little plants, some hardly above the ground, and others from that size up to three or four inches in height, some in bloom.

These are puzzlers. I might think they were from seed, but who sowed it? Dr. and Mrs. Workman own the place, but they left Nantucket for the Himalayas years ago, and their house has been closed ever since. The few who know of this interesting cluster lay it to Mrs. Dahlgren’s agency,—really a probable conjecture,—her cottage was not far from Monsalvat, the Workman place — and although



she has not been on the island for five years, these little plants may be older than we think; we cannot set up as judges of the age of plants which we in this country have never had a chance of studying. It would be absurd to suppose they were natives of the soil and had shown themselves only in these late years. When I saw these pretty little things so stout and healthy amongst the grass, I felt that the Scotch ling had settled there to stay; it thrives in our climate, and in time the slope may be covered with it, at the right season all aglow with its rosy flowers.

In August of this year I heard of two *Callunas* discovered in a new locality by Dr. E. Le Roy Thomson of New Haven, Ct., and under his guidance I went to see them. They are a few feet apart on the open common, growing amongst the usual vegetation of the locality; the largest spreads from one root about three feet six inches by two feet nine, the other, nearly circular, is about three feet in diameter. Dr. Thomson first observed them in July, 1906, while on one of his frequent rides over the island and has seen them every year since; from their rate of growth, which is more rapid than that of the Coffin plants, he judges that they may be from eight to ten years old. They are miles away from any human habitation as well as from the nursery; it seems improbable that they can have sprung from wind-wafted seed of the Henry Coffin plants, but are more likely to be of the Starbuck, Kimball or Dahlgren sowing, and this will be the most plausible explanation for the appearance of any that may be discovered hereafter on the island.

In September of this year Dr. Thomson found still another *Calluna* on the open common, but far from the two just mentioned as well as from the nursery. This is a large plant, about three feet in diameter.

The cross-leaved heather, *E. tetralix*, has diminished sadly in numbers since 1887 when Miss Coffin found some twenty-five plants, more than twice as many as in 1884. It is very attractive with its head of delicate pink blossoms, and by the reckless picking of some of its admirers it is too often pulled out of the ground, so that it has been reduced in number to five individuals. This is in the locality by which the road passes, but in the ten acres or more of the Coffin and Emerson nurseries Dr. Thomson has discovered other specimens, eight measuring each from twelve to twenty inches in diameter and eleven small ones. By means of these hidden away in places difficult of access the species may keep its existence.



The sum of these investigations is this: that one plant of *Erica cinerea* which it has been impossible to trace to human agency appeared in Nantucket forty years ago and lived till 1902 or 1903; that there are two of the same species of doubtful origin now alive near the spot where the first was found; that the Lawrence Coffin *Calluna*, now dead, in all probability adds one more locality for this as a wild plant to those previously known in New England and the British provinces; that the *Calluna* of the nursery came in from Europe with the imported trees; that every other bit of it on the island goes back to that for its origin, or else has come from the Kimball, Dahlgren or Starbuck seed, and that the cross-leaved heather, *Erica tetralix*, stays under the pines and larches where it was first found.

BROOKLYN, N. Y.

#### ADDITIONAL LISTS OF CONNECTICUT DIATOMS.

WILLIAM A. TERRY.

DURING the past year I sent to Tempère at his request some fifty different gatherings of North American diatoms. He was about to issue the second edition of the "Diatomées du monde entier"<sup>1</sup> and I was pleased at the opportunity of bringing these collections to the notice of the scientific world, especially as many of them contained new species that I had discovered. Among these gatherings was one from "Doer's Mountain Grove" Ice pond, on a small mountain brook near New Britain reservoir. This was notable as containing abundance of *Surirella Terryi* Ward. This *Surirella* was the principal form in Spring's Pond, a small pond on the north bank of the Pequaback River in Bristol, and with it were numbers of the small *S. ovalis* var. *angusta* (Kütz.) V. H. A quarter mile down the river just east of Saw Shop is a pond hole on the Lee property formed by cutting off a bend of the river when the highway was moved to accommodate the railroad; this is also rich in *S. Terryi*. Below this

<sup>1</sup> Diatomées du monde entier. Collection Tempère et Peragallo. Deuxième Édition. 1907-1908.